

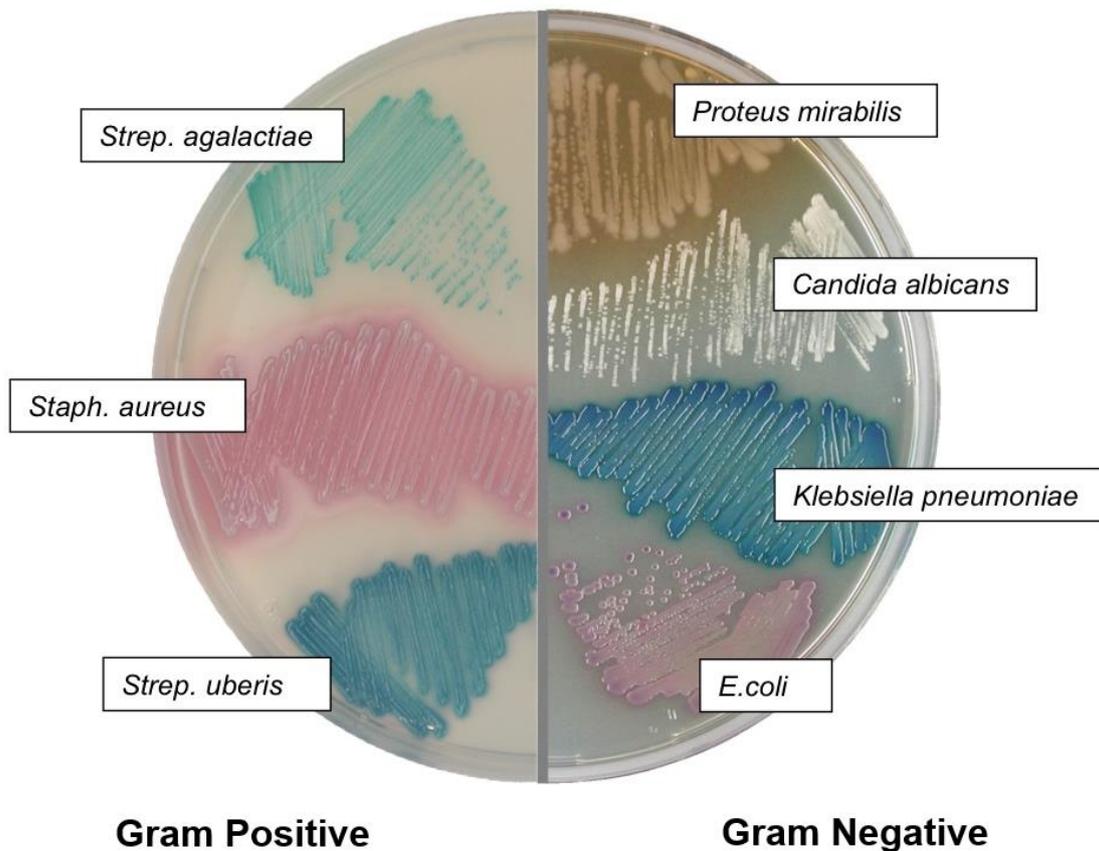
# HygieneChek

## CHROMagar Mastitis

### Information Sheet

For Mastitis testing in milk

Order No.10001664



#### 1. Test Principle

The **HygieneChek™** CHROMagar Mastitis consists of a tube containing a paddle with two different selective agar attached (CHROMagar Mastitis).

The sample is taken by dipping the agar into the milk which is wanted to be tested.

**1. Side (milky white)**



**2. Side (transparent amber)**



**Gram positive strains:**

*Streptococcus agalactiae*  
*Streptococcus uberis*  
*Staphylococcus aureus*  
*Enterococcus*

**Gram negative strains:**

*Escherichia coli*  
*Proteus mirabilis*  
*Klebsiella pneumoniae*  
*Candida albicans*

**2. Composition (in g/L)**

**1. Side: Mastitis Gram Positive**

Agar	15.0
Peptone and Yeast extract	20.0

Salts	5.0
Chromogenic and selective mix	5.0

pH: 6.9 +/- 0.2 (Classical formula adjusted and/or supplemented as required to meet performance criteria).

## **2. Side: Mastitis Gram Negative**

Agar	15.0
Peptone and Yeast extract	17.0
Chromogenic and selective mix	1.2

pH: 7.0 +/- 0.2 (Classical formula adjusted and/or supplemented as required to meet performance criteria).

## **3. Sample Material**

Milk

## **4. Limit of Detection, Test Duration and Storage Instructions**

- The sensitivity is in the range of  $5 \times 10^2 - 1 \times 10^3$  c.f.u. / ml.
- Incubate at 35-37°C.
- The duration of incubation of the test is between 24-36 hours and depends on the concentration of the microorganism in the milk sample.
- Store the Mastitis test at 2-15°C in darkness. Recommended temperature for long term storage is 15°C

## **5. Kit contents**

**HygieneChek** CHROMagar Mastitis is shipped as box containing 20 paddles being double-sided coated with agar of which one side is coated with an agar for gram positive and the other side is coated with an agar for gram negative Mastitis strains allowing 20 examinations in total.

## **6. Additional equipment required**

- Incubator 35-37°C

- Autoclave

- Autoclave-bags

## 7. General remarks

For colors of the media, the storage conditions and the fields of application we refer to the package insert. Please follow the storage advices on the box of the paddles and read the carton insert.

Do not touch the agar surface! To remove the screw-cap from the paddle, please twist it a bit. For ventilation open the cap in a  $\frac{3}{4}$  turn. The container has to be closed thoroughly with the screw-cap before transport.

Upon reading of the results dispose the paddles by autoclaving (134°C, 3 bar, 30min).

## 8. Taking a Specimen and Test Procedure

1. Thoroughly clean the udder of the animal with water, followed by a tissue impregnated with adequate disinfectant solution.
2. Remove paddle from tube, holding it at the cap, and then place it in a stable safe area standing on its cap. DO NOT TOUCH agar's surface.
3. Fill 2:3 of the plastic tube with the milk sample, (either directly from the teat or from milk tank being tested).
4. Dip paddle into the milk in the tube, allowing excess milk to spill over.
5. If there is not enough milk in the tube, screw the cap tightly and invert the tube completely in order to cover the all agar surface.
6. Hold the tube vertically with one hand, remove the paddle with the other hand, holding it by the cap.
7. Discard all the milk in the tube and shake it well to remove as much milk as possible. Gently, flick the paddle to remove the milk on it.
8. Place the paddle again back into the tube and screw the cap tightly for transport.
9. For incubation screw the cap loosely by a  $\frac{3}{4}$  turn to allow exchange of atmosphere

10. Write all relevant details on the HY-ID label provided and stick on tube.
11. Incubate for 24-36 hours at 35-37°C.
12. Interpret results as in table.
13. Used contaminated test material should be handled by standard decontamination methods such as autoclaving, incineration or by commercial bleach (hypochlorite), prior to disposal.

## 9. Interpretation of results

	GRAM POSITIVE SIDE	GRAM NEGATIVE SIDE	ID CONFIRMATION
	Typical appearance	Typical appearance	Suggested if needed
Non-inoculated	White Opaque	Transparent Amber	
Gram positive	<i>Streptococcus agalactiae</i>	Turquoise colonies; may be surrounded by a turquoise halo	Inhibited Hippurate hydrolysis positive; PYRase positive; GLCase negative;
	<i>Streptococcus dysgalactiae</i>	Small delicate turquoise colonies	Inhibited Hippurate hydrolysis negative
	<i>Streptococcus uberis</i>	Middle-size metallic turquoise-blue colonies	Inhibited PYRase positive; GLCase negative;
	<i>Enterococcus faecalis</i>	Big metallic-blue colonies; May be surrounded by a blue halo	Inhibited PYRase positive; GLCase positive
	<i>Staphylococcus epidermidis</i>	Pink colonies surrounded by a pink halo	Inhibited
	<i>Staphylococcus aureus</i>	Big salmon to pink colonies; may be surrounded by a pink halo	Inhibited Item. No. 49449R pink-mauve colonies
Gram negative	<i>Escherichia coli</i>	Inhibited	Middle-size pink-mauve colonies Indol test positive
	<i>Klebsiella pneumoniae, Citrobacter, Enterobacter</i>	Inhibited	Big mucoid metall-blue colonies
	<i>Proteus spp.</i>	Inhibited	Middle-size clear beige to brown colonies on beige background
	<i>Pseudomonas spp.</i>	Inhibited	Rather big transparent to green colonies, creamy, irregular edges Oxidase positive
	<i>Candida albicans</i>	Inhibited	Small milky wet colonies